

Appl. No. 10/809,728

Amdt. Dated 12 May 2006

Reply to Office action of 22 March 2006

**AMENDMENTS TO THE CLAIMS**

Please substitute the following claims for the respective claims previously existing in this application.

1. (Currently amended) A method of operating a fuel cell comprising the steps of:  
activating a membrane electrode assembly by supplying reactants to the membrane electrode assembly; and  
selectively limiting amount of electrons collected from localized areas of the membrane electrode assembly surface by utilizing a porous, Z-axis electrically conductive, non-linear positive temperature coefficient material disposed on a side of the membrane electrode assembly.
2. (Cancelled)
3. (Cancelled)
4. (Currently amended) The method of claim 1 2, wherein the Z-axis electrical resistivity at localized areas of the non-linear positive temperature coefficient material changes from a first value to a second value in response to a trigger condition at areas of the membrane electrode assembly adjacent to the localized areas of the non-linear positive temperature coefficient material.
5. (Original) The method of claim 4, wherein the trigger condition is created in response to a combination of one or more elements selected from the group consisting of temperature, pH, hydrogen concentration, electrolyte water content, electrolyte thickness, electrolyte ionic conductivity and electrolyte electronic conductivity of the membrane electrode assembly adjacent to the non-linear positive temperature coefficient material layer, crossing a threshold value.